**LESSON #12**

Class: Biology

Unit: The Cell

Topic: Specialized Cells: I’m special, no I’m special…

**Instructional Objectives: Students will be able to …**

* Give examples of specialized cells
* Describe features of a cell that can help determine its function
* Explain the behavior of cancer cells and why they are considered unspecialized.
* Determine what stem cells are considered.

**Time Activity**

9:00 – 9:15 Brainstorm using “specialized” as the cue word. This is to access prior knowledge and clarify what specialized refers to. Start discussion on how these responses relate to cells.

9:15 – 9:20 Students will read pages 138 – 139 in their textbook

9:20 – 9:30 Students will pair off and list at least 3 more examples of specialized cells that are different than those mentioned in the book. After they finished their list they will come up with some reasons they feel these cells need to be specialized. (Lung cells need to be able to handle more oxygen than most other cells). These will be collected

9:30 – 9:43 Discuss what was read regarding cancer cells and how they behave. I will ask why they are considered unspecialized, do they agree or not. Will then bring up stem cells and ask what they think they are considered. Through this discussion will try and lead it in a way that allows them to determine that stems cells are considered unspecialized cells that have the ability to become specialized.

**Assignment:**

* Each student needs to choose 2 different examples of a specialized cell. For each example they will create a labeled drawing of the cell along with an explanation as to what it is specialized for. They will also point out the physical differences between their 2 cell choices and the reason for them.

**Resources for lesson:**

* Textbook pages 138 - 139